

UNITED STATES PATENT APPLICATION  
Non-Linear Adaptive AM/AM and AM/PM Pre-Distortion Compensation  
With Time and Temperature Compensation for Low Power Applications

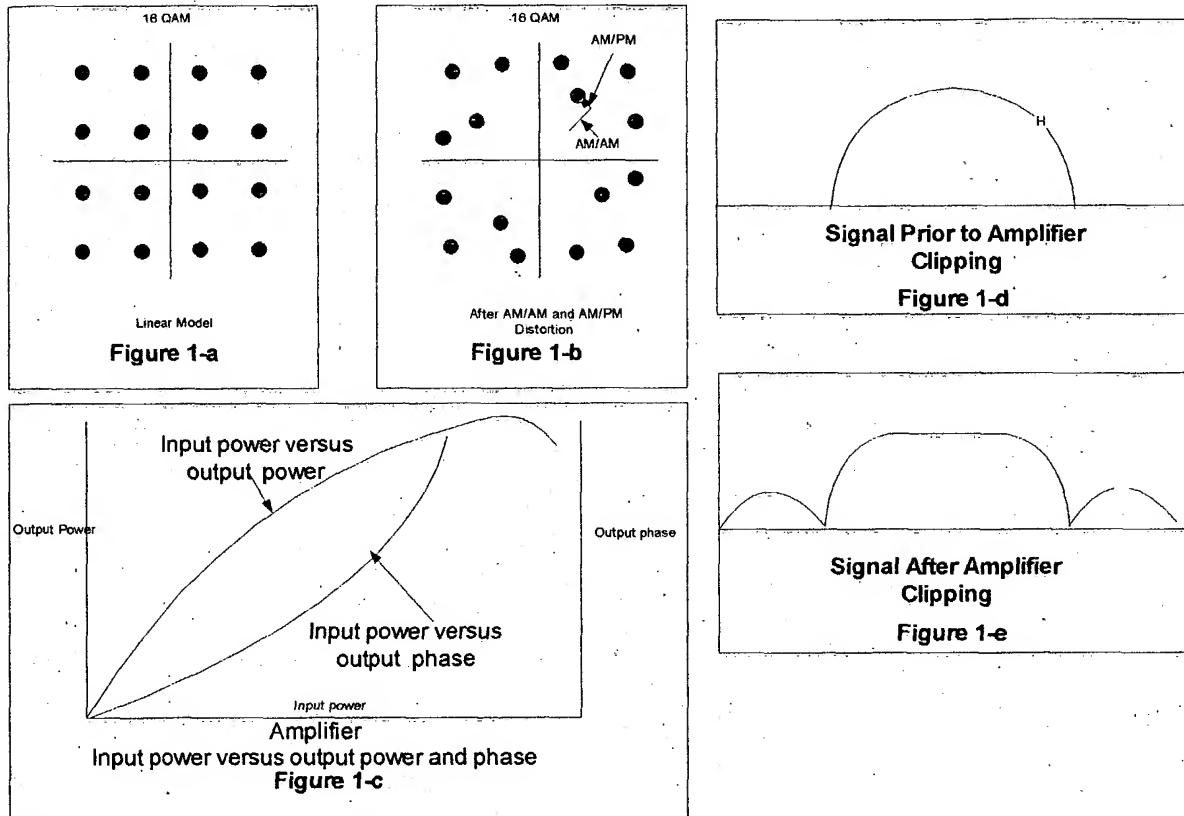


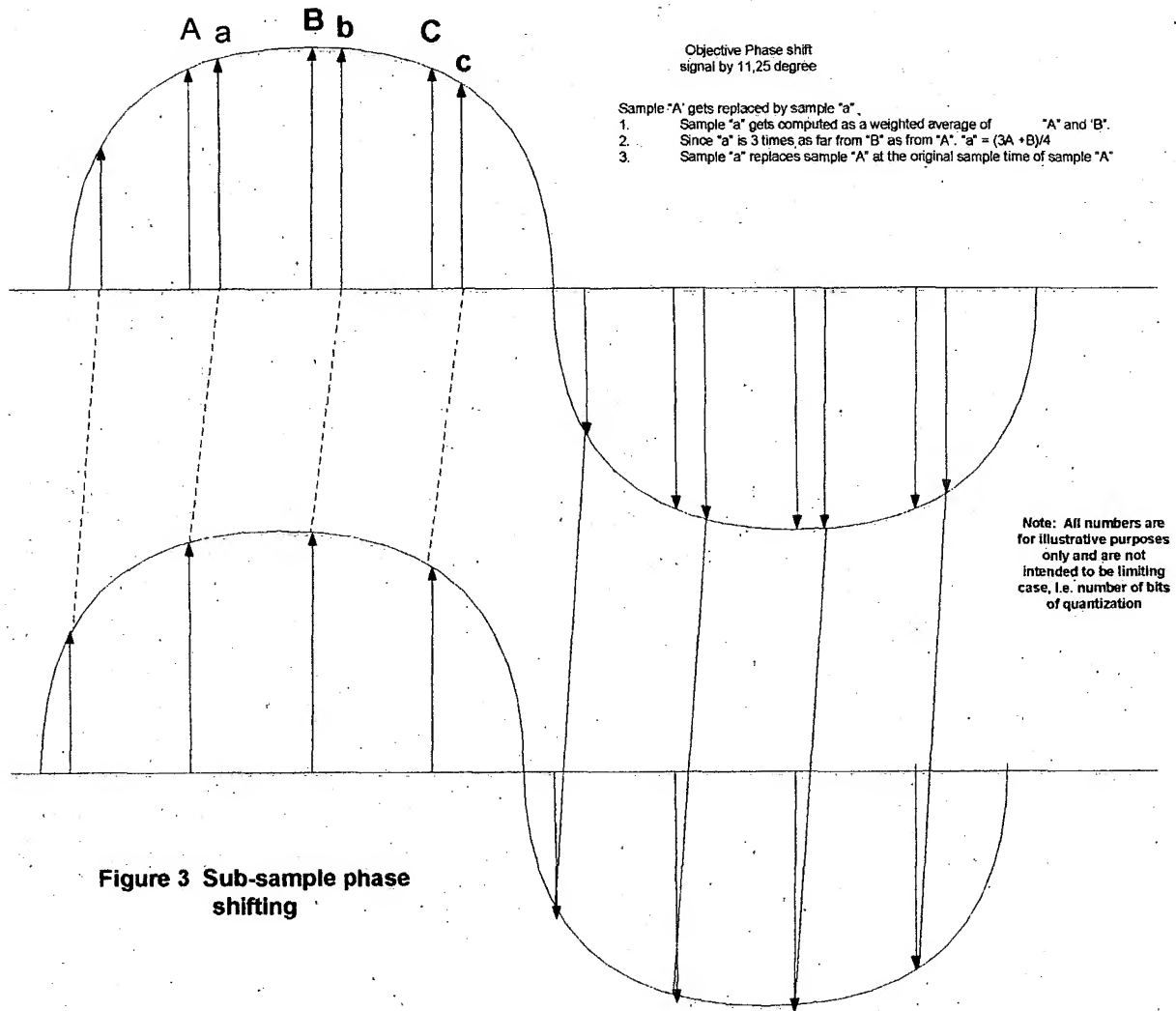
Figure 1: AM/AM and AM/PM Non-linear Distortion of an Amplifier

## TOP LEVEL BLOCK DIAGRAM

[illegible]

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**Figure 3 Sub-sample phase shifting**

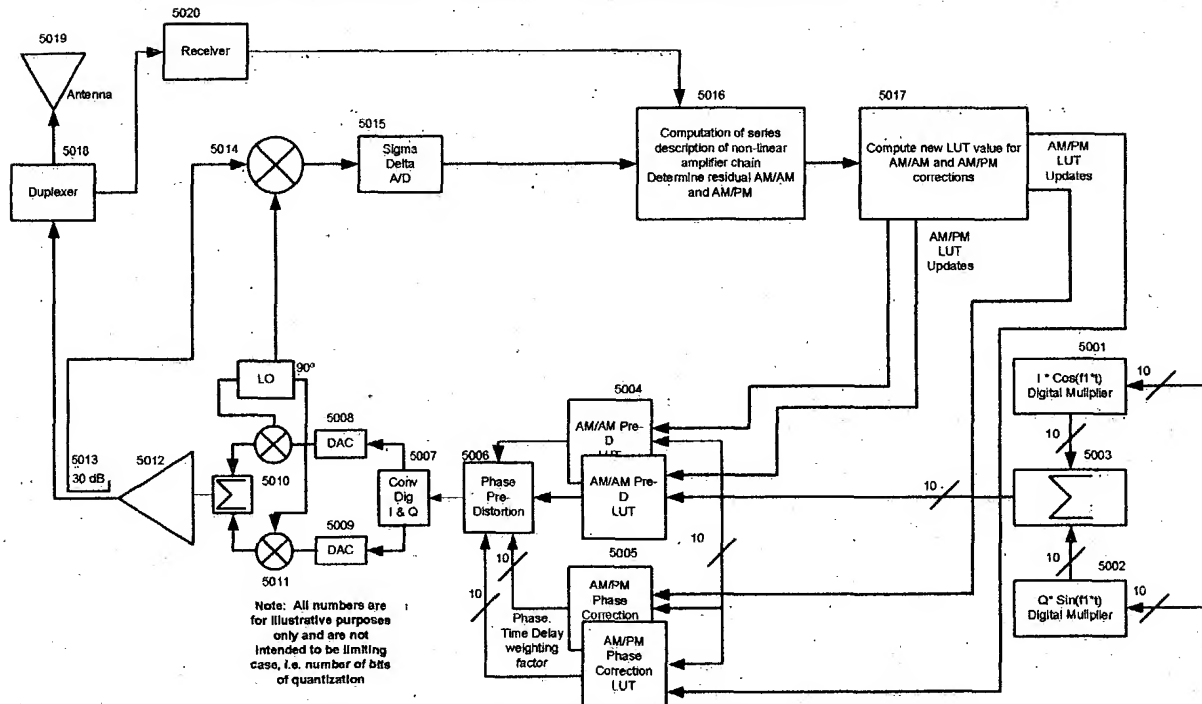


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### NL Transmitter

#### Series Description of Non-linearity Compensation



**Figure 5 Mathematical Series Description of NL for Pre-distortion**